

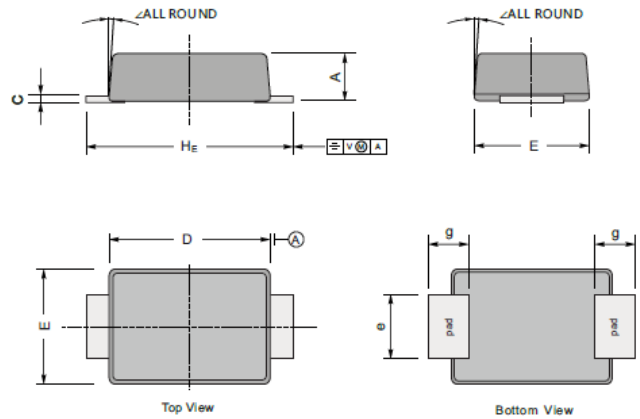
Silicon Planar Zener Diodes

Primary characteristics		
Parameter	Value	Unit
V _Z range nom.	3.3 to 330	V
Power rating	1	W

Features

- Case: SMAF
- Pb-free and **RoHS** compliant
- Approx. weight: 0.027g / 0.00086oz

Case dimensions



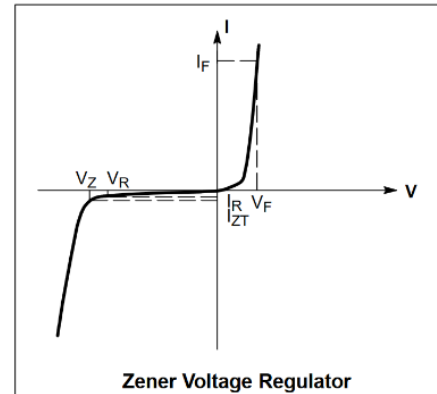
SMAF

Unit	A	C	D	E	e	g	H _E
mm	1.1 ±0.20	0.2 ±0.10	3.7 ±0.50	2.7 ±0.30	1.6 ±0.30	1.2 ±0.40	4.9 ±0.50

Absolute maximum ratings (T_a = 25°C)

Parameter	Symbol	Value	Unit
Forward Voltage @ I _F =200mA	V _F	1.2	V
Power Dissipation ¹⁾	P _D	1	W
Junction Temperature	T _J	-55 ~ 150	°C
Storage Temperature Range	T _S	-55 ~ 150	°C

Parameters list	
Symbol	Parameter
V_Z	Reverse Zener Voltage @ I_{ZT}
I_{ZT}	Reverse Current
I_R	Reverse Leakage Current @ V_R
V_R	Reverse Voltage
I_F	Forward Current
V_F	Forward Voltage @ I_F

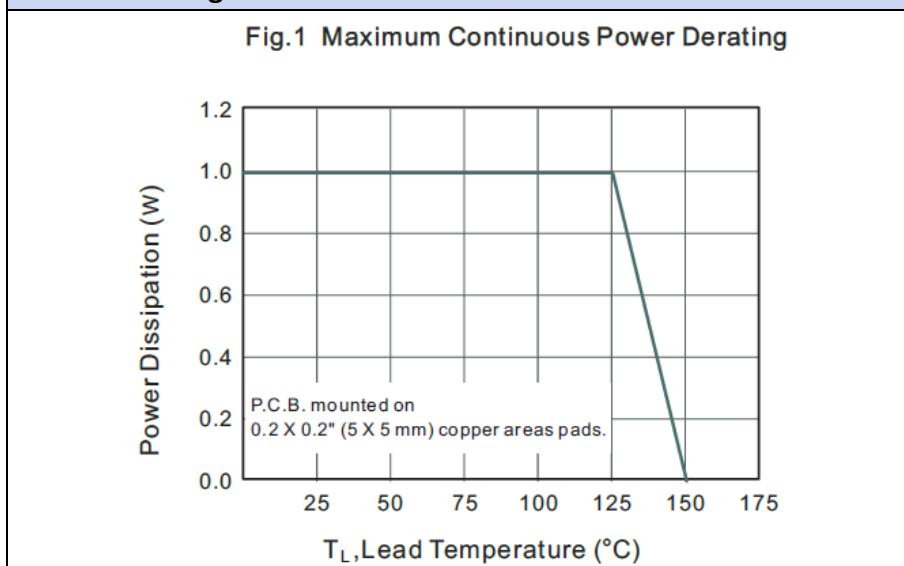


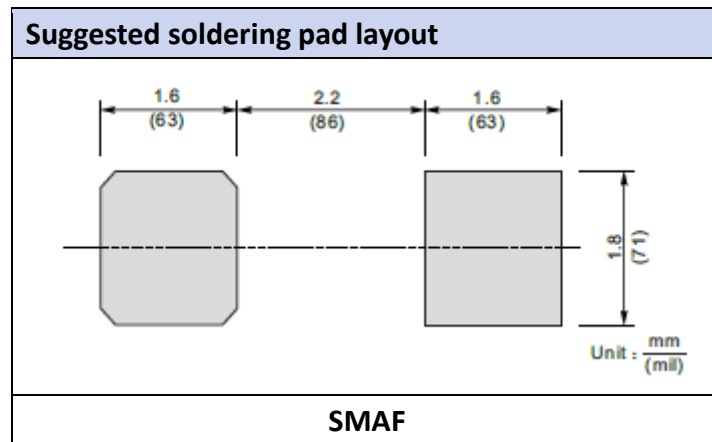
Characteristics table ($T_a = 25^\circ\text{C}$)								
Type	Marking Code	Zener Voltage @ $I_{ZT}=5\text{mA}$		Dynamic Resistance		Reverse Current		Admissible Zener Current
		V_Z nom.	V_{ZT}	r_{ZT} @ I_{ZT}		I_R @ V_R		I_{ZM}
		V	V	Ω	mA	μA	V	mA
1SMAF4728A	728A	3.3	3.10 ~ 3.50	<10	75	<100	1.0	285
1SMAF4729A	729A	3.6	3.40 ~ 3.80	<10	69	<100	1.0	263
1SMAF4730A	730A	3.9	3.70 ~ 4.10	<9.0	64	<50	1.0	243
1SMAF4731A	731A	4.3	4.06 ~ 4.56	<9.0	58	<25	1.0	219
1SMAF4732A	732A	4.7	4.50 ~ 4.93	<8.0	53	<10	1.0	203
1SMAF4733A	733A	5.1	4.84 ~ 5.36	<7.0	49	<10	1.0	186
1SMAF4734A	734A	5.6	5.32 ~ 5.92	<5.0	45	<10	2.0	170
1SMAF4735A	735A	6.2	5.86 ~ 6.51	<2.0	41	<10	3.0	154
1SMAF4736A	736A	6.8	6.46 ~ 7.18	<3.5	37	<10	4.0	140
1SMAF4737A	737A	7.5	7.12 ~ 7.88	<4.0	34	<10	5.0	127
1SMAF4738A	738A	8.2	7.79 ~ 8.67	<4.5	31	<10	6.0	116
1SMAF4739A	739A	9.1	8.60 ~ 9.59	<5.0	28	<10	7.0	104
1SMAF4740A	740A	10	9.5 ~ 10.5	<7.0	25	<10	7.0	95
1SMAF4741A	741A	11	10.4 ~ 11.6	<8.0	23	<5.0	8.0	86
1SMAF4742A	742A	12	11.4 ~ 12.6	<9.0	21	<5.0	9.0	79
1SMAF4743A	743A	13	12.4 ~ 14.1	<10	19	<5.0	10	71
1SMAF4744A	744A	15	13.8 ~ 15.8	<14	17	<5.0	11	63
1SMAF4745A	745A	16	15.2 ~ 17.1	<16	16	<5.0	12	58
1SMAF4746A	746A	18	16.8 ~ 19.2	<20	14	<5.0	13	52
1SMAF4747A	747A	20	19.0 ~ 21.2	<22	13	<5.0	15	47
1SMAF4748A	748A	22	20.8 ~ 23.3	<23	12	<5.0	17	43
1SMAF4749A	749A	24	22.8 ~ 26.0	<25	11	<5.0	18	38
1SMAF4750A	750A	27	25.3 ~ 28.9	<35	9.5	<5.0	21	35
1SMAF4751A	751A	30	28.2 ~ 32.0	<40	8.5	<5.0	23	31
1SMAF4752A	752A	33	31.3 ~ 34.9	<45	7.5	<5.0	25	28
1SMAF4753A	753A	36	34.2 ~ 37.9	<50	7.0	<5.0	27	26
1SMAF4754A	754A	39	37.2 ~ 41.5	<60	6.5	<5.0	30	24
1SMAF4755A	755A	43	40.9 ~ 45.6	<70	6.0	<1.0	32	22
1SMAF4756A	756A	47	44.9 ~ 49.8	<80	5.5	<1.0	35	20
1SMAF4757A	757A	51	48.6 ~ 54.0	<95	5.0	<1.0	38	18
1SMAF4758A	758A	56	53.6 ~ 58.8	<110	4.5	<1.0	42	17

Characteristics table ($T_a = 25^\circ\text{C}$)

Type	Marking Code	Zener Voltage @ $I_{ZT}=5\text{mA}$		Dynamic Resistance		Reverse Current		Admissible Zener Current I_{ZM} mA
		V_Z nom.	V_{ZT}	$r_{ZT} @ I_{ZT}$		$I_R @ V_R$		
		V	V	Ω	mA	μA	V	
1SMAF4759A	759A	62	58.9 ~ 65.6	<125	4.0	<1.0	47	15
1SMAF4760A	760A	68	64.6 ~ 71.7	<150	3.7	<1.0	52	14
1SMAF4761A	761A	75	71.2 ~ 78.8	<175	3.3	<1.0	56	12
1SMAF4762A	762A	82	77.9 ~ 87.0	<200	3.0	<1.0	62	11
1SMAF4763A	763A	91	86 ~ 96	<250	2.8	<1.0	69	10
1SMAF4764A	764A	100	95 ~ 105	<350	2.5	<1.0	76	9.5
1SMAF4765A	765A	110	104 ~ 116	<450	2.3	<1.0	84	8.6
1SMAF4766A	766A	120	114 ~ 127	<550	2.0	<1.0	91	7.8
1SMAF4767A	767A	135	125 ~ 142	<700	1.9	<1.0	100	7.0
1SMAF4768A	768A	150	140 ~ 157	<900	1.7	<1.0	110	6.3
1SMAF4769A	769A	165	155 ~ 172	<1100	1.6	<1.0	120	5.8
1SMAF4770A	770A	180	170 ~ 191	<1200	1.4	<1.0	135	5.2
1SMAF4771A	771A	200	189 ~ 211	<1400	1.2	<1.0	150	4.7
1SMAF4772A	772A	220	209 ~ 231	<1600	1.0	<1.0	165	4.3
1SMAF4773A	773A	240	229 ~ 251	<1800	1.0	<1.0	180	3.9
1SMAF4774A	774A	260	249 ~ 271	<2000	1.0	<1.0	190	3.7
1SMAF4775A	775A	280	269 ~ 291	<2100	1.0	<1.0	205	3.4
1SMAF4776A	776A	300	289 ~ 315	<2300	1.0	<1.0	230	3.1
1SMAF4777A	777A	330	313 ~ 346	<2500	1.0	<1.0	250	2.8

Power derating curve





Ordering information			
Part Number	Package	Shipping Quantity	Packing description
1SMAF4728A ~ 1SMAF4777A	SMAF	3000 pcs / reel	Tape / reel, 7" reel
		10000 pcs / reel	Tape / reel, 13" reel

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